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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/486,343

02/25/2000

JEAN-MARIE BERNARD

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12/05/2003

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EXAMINER

NILAND, PATRICK DENNIS

ART UNIT

PAPER NUMBER

1714

DATE MAILED: 12/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/486,343

Applicant(s)

BERNARD ET AL.

Examiner

Patrick D. Niland

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 66-175 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 66-175 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

Art Unit: 1714

1. The amendment of 11/21/03 has been entered. Claims 66-173 are pending.

2. The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 66-117 and 147-175 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat. No. 5300556 Tirpak et al..

Tirpak et al. discloses the instantly claimed methods, compositions, method of coating, and coating at the abstract; column 2, line 15 to column 10, line 44, particularly column 3, lines 1-68, column 4, lines 1-38 and 60-68; column 5, lines 1-68, column 6, lines 3-65, and column 7, lines 1-27 and the examples. The instant claims require blocked polyisocyanates, which the patentee clearly discloses. See the title and the sections relied on above. It is noted that the dispersion of blocked polyisocyanate, emulsifier, and water falls within the scope of emulsion. This is clear to the ordinary skilled artisan and should be clear to others based on the similarity of "emulsion" and "emulsifier". The patentee encompasses adding the isocyanate to an aqueous

composition of surfactant and blocking agent (column 6, lines 3-7 and 50-52) which falls within the scope of the instantly claimed one step emulsifying and blocking reaction. Since all of the NCO is reacted by the patentee, the free NCO content of the instant claims is met. This rejection is maintained.

5. Claims 66-175 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pat. No. 5300556 Tirpak et al. in view of EP 367667 Yasuda et al. .

Tirpak discloses the compositions, methods, and coatings as discussed above. It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the instantly claimed surfactants as the surfactants used by these patentees because Yasuda shows such surfactants to impart desired properties to aqueously dispersed polyurethanes and these surfactants would have been expected to impart these properties to the above discussed emulsions where the surfactant of Yasuda is used as the surfactants of the primary references. With regard to the particle sizes of the instant claims, those of water soluble particles such as polyether particles are expected to be very small, i.e. within those of the instant claims, and those of dispersed polyurethanes are typically less than 10 micrometers with smaller particles being more stable. Furthermore, self dispersible polyurethanes are typically less than 1 micrometer in size as would be appreciated by the ordinary skilled artisan. Thus, the examiner believes that the state of aqueous self emulsifiable polyurethanes is such that the ordinary skilled artisan would necessarily use the instantly claimed particle sizes in the emulsions of the primary references, it is at least obvious to use these particle sizes in the primary references of this rejection because they are known to give the most stable emulsions at ambient conditions. Yasuda is relied on for its teaching of known polyisocyanate emulsifiers, not the other parameters argued by the applicant. The patentee encompasses adding the isocyanate to an aqueous composition of surfactant


and blocking agent (column 6, lines 3-7 and 50-52) which falls within the scope of the instantly claimed one step emulsifying and blocking reaction. Since all of the NCO is reacted by the patentee, the free NCO content of the instant claims is met. Tirpak encompasses a solids content of up to 50% by weight. Therefore, at the upper solids content, there will be less than 50% by mass of water because of the surfactants, flow control agents and other additives of the patentee which are not part of the solids content. The argument that Yasuda is directed to solid particles and therefore one of skill in the art would not look to them for surfactants is not persuasive because the primary reference encompasses the use of ionic surfactants generally and therefore encompasses the surfactant of Yasuda. Yasuda merely shows that the instantly claimed surfactant is known and is compatible with polyurethanes. The applicant provides no evidence of any difference in dispersing the particles of Yasuda and those of Tirpak. Note the reference to "solids" content in Tirpak. Thus, the particles of Tirpak are also solid particles. By definition of the word surfactant, the compound of Yasuda is expected to function to emulsify the product of Tirpak.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick Niland whose telephone number is (703) 308-3510. The examiner can normally be reached on Monday to Friday from 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on (703) 306-2777. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

pn
December 3, 2003


Patrick Niland
Primary Examiner
Art Unit 1714